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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,510	01/12/2001	John T. Moy	S1415/7010 /SJH/DPM	2156

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Boston, MA 02210-2211

EXAMINER

TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,510

Applicant(s) **OK**

MOY ET AL.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-128 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/24/02, 4/17/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14, 16-35, 37-55, 57-61, 63-76, 78-97, 99-117, 119-123 and 125-127 are rejected under 35 U.S.C. 102(e) as being anticipated by Graves et al. (US 6,741,572).

Regarding claims 1, 21, 42, 63, 83, 104 and 125-127, Graves discloses, in Figs 4-6, a router 40' (claimed first device), a router 40 (claimed one or more other devices), CM at C and ALS 30 C (claimed a first transport network), a signal s1 (claimed a first signal from the first device), CM at A and ALS A (claimed a second transport network device), and a signal s16 (claimed a second signal). Further, Graves discloses that a network path is the set of all the ports that send traffic from a particular router to a specific destination node, so identifying the network path also identifies the destination node to which the port sends its traffic (column 13, lines 20-24).

Regarding claims 2, 22, 43, 64, 84 and 105, Graves discloses the method further comprising: transmitting the first signal from the first device (s1); and receiving the second signal at the first device (s16).

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Regarding claims 3, 23, 44, 65, 85 and 106, Graves discloses the method further comprising an act of: determining the second port to which the first device can send signal corresponding to an optical trail (column 2, lines 20-24; column 13, lines 20-24).

Regarding claims 6, 27, 47, 68, 89 and 109, Graves discloses the method wherein acts a) and b) are performed in accordance with the point-to-point protocol (column 10, lines 50-53).

Regarding claims 7, 28, 48, 69, 90 and 110, Graves discloses the method wherein the first signal is received from the first port of the first device (column 4, lines 61-66).

Regarding claims 8, 29, 49, 70, 91 and 111, Graves discloses the method wherein the first signal identifies a user group to which the first port belongs (column 13, lines 17-29).

Regarding claims 9, 30, 50, 71, 92 and 112, Graves discloses the method wherein the first signal includes a signature corresponding to the first device (column 13, lines 17-29).

Regarding claims 10, 31, 51, 72, 93 and 113, Graves discloses the method wherein the first signal comprises one or more port characteristic signal, each port characteristic signal indicating a characteristic of the first port (column 2, lines 20-25).

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Regarding claim 11, 32, 52, 73, 94 and 114, Graves discloses the method wherein at least one of the characteristic signal indicates an ability of the first port to support concurrently a plurality of channels (column 12, lines 35-51).

Regarding claims 12, 33, 53, 74, 95 and 105, Graves discloses the method wherein the second signal comprises an acknowledge signal acknowledging that the first port is available to be allocated an optical trail (column 17, lines 29-35).

Regarding claims 13, 34, 54, 75, 96 and 116, Graves discloses the method wherein the second signal further comprises one or more port characteristic signals, each port characteristic signal indicating a characteristic of the second port of the first transport network device (column 17, lines 29-35).

Regarding claims 14, 35, 55, 76, 97 and 117, Graves discloses the method wherein at least one of the port characteristic signals indicates an ability of the second port to process concurrently a plurality of channels associated with the first port (column 12, lines 40-62; column 17, lines 29-35).

Regarding claims 16, 37, 57, 78, 99 and 119, Graves discloses the method wherein the second transport network (CM at A) device is not the first transport network device (CM at C).

Regarding claim 17, 38, 58, 79, 100 and 120, Graves discloses the method wherein the first device (40) is physically interfaced to the first transport network device by at least a first link (CM).

Regarding claims 18, 39, 59, 80, 101 and 121, Graves discloses the method wherein the first link is an optical link (column 10, line 60-column 11, line 21).

Regarding claims 19, 40, 60, 81, 102 and 122, Graves discloses the method wherein the first transport network device is capable of receiving and transmitting optical signals (column 10, line 60-column 11, line 21).

Regarding claim 20, 41, 61, 82, 103 and 123, Graves discloses, Fig. 4, the method wherein the second transport network device (CM 25A and ALS 30A) capable of receiving and transmitting signals (column 10, lines 45-53).

Regarding claims 4, 5, 25, 26, 66, 67, 107 and 108, Graves discloses an optical transport network. SONET is an optical network that is used to the transmission of various typed of communication signals. Therefore, it is inherent that the first signal is included in the SONET frame, as well as, the request signal is included in overhead bytes of SONET frame.

Regarding claims 24 and 86, Graves discloses the system wherein the input and the output are a same port of the first optical transport network device (CM 25C).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15, 36, 56, 62, 77, 98, 118, 124 and 128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grave et al.

Regarding claims 15, 36, 56, 77, 98 and 118, Graves discloses all the claim limitations as stated above except for the method wherein the second transport network device is the first transport network device.

Graves discloses a communications network comprising a plurality of interconnected transport network device. However, it would have been obvious to one of ordinary skill in the art to use the second transport network device as the first transport network device when nodes are geographically distributed over small area.

Regarding claims 62, 124 and 128, Grave discloses all the claim limitations as stated above except for a computer program product comprising a computer readable medium.

However, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use software-based machines. The benefit using computer-readable device is that programs can be changed and upgraded and new futures are added easily than hardware changes.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ballintine et al. (US 6,724,996) discloses an apparatus and method for providing optical channel overhead in optical transport networks.

Dombrowski et al. (US 6,632,032) discloses a remote data network access in a communication network utilizing overhead channels.


Lee et al. (US 6,559,984) discloses an apparatus for monitoring optical path based on the identification of optical cross-connect input ports.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST
November 19, 2004


JOHN PEZZLO
PRIMARY EXAMINER